REMARKS/ARGUMENTS

This amendment is provided in response to the February 23, 2005, Office Action. As shown above claims 1 and 41 are amended herein, and claims 1-4 and 9-48 remain pending in this action.

The 2/23/05 Objected to the an informality in claim 41. It is respectfully submitted that the above amendment addresses the informality which was the basis to the objection to claim 41.

The 2/23/05 Office Action rejected previously pending claims 1-48 as being anticipated by Robertson et al. (US 2002/0173984).

It is respectfully submitted that the present amendment to claim 1, which is described in more detail below, is provided to more clearly distinguish elements of an embodiment of the present invention. However, the present amendment is submitted without prejudice to pursuing the previously pending claims through a continuation case or other alternatives. Further the present amendment should not be taken as an admission that the Robertson et al. reference is prior art to the present application.

Amended Claim 1

As shown above, claim 1 has been amended to specifically recite additional aspects of the service provider container. For ease of reference, elements of amended claim 1 are shown below:

> a bus;
> a service requestor container operatively coupled to said bus, said service requestor container containing a service requestor application;
> a service provider container operatively coupled to said bus, said service provider container containing a service provider application;
> wherein the service provider container includes **an interaction broker component,** said interaction broker providing an interface between said bus and said service provider application;
> wherein said **interaction broker component includes a request broker component for invoking said service provider application based upon service requests received from said bus;**
> wherein said **interaction broker component includes an event handler component for invoking said service provider application based upon events read from said bus;**
> wherein said **interaction broker component includes a stream handler component for invoking said service provider application based upon data read from a stream;** and,
> a virtual data store operatively coupled to said service requestor container and to said service provider container.

It is noted that each of the areas shown in bold above, are elements which were added to the claim 1 by the present amendment. However, each of these elements are derived from

previously pending claims 5 – 8. These added elements of claim 1 highlight a very significant aspect of the present invention, which appears to be very different than the teaching of the Robertson et al. Specifically, the system of claim 1 provides that the service provider container includes an interaction broker component, and the interaction broker component includes a request broker component, an event handler component; and a stream handler component. Using each of its different broker components (request broker, event handler and stream handler) the interaction broker invokes said service provider application, and the invocation is based on either the service request, the events, or the stream received from the bus. An important aspect of this system is that a single service provider application is utilized for the different types of data interfaces (service request, stream, or event) and the service container invokes the service application as per the needed type of interface. This is different than the situation where three different service provider applications are provided with different interfaces. For the Examiner's ease of reference, it is noted that aspects of the invention related to the above added elements of claim 1 area discussed in more detail in the pending application at page 22, line 23 to page 24, line 20.

The Teaching of Robertson et al.

The 2/23/05 Office Action refers to numerous paragraphs of Robertson et al. in rejecting the previously pending claims. Given that the elements added to claim 1 are derived from previously pending dependent claims 5-8, the discussion herein focuses primarily on those paragraphs of Robertson et al. which were identified in the 2/23/05 Office Action as specifically supporting the rejections of claims 5-8. However, it should be noted that the undersigned has reviewed all of the extensive Robertson et al. reference, and attempted to discern whether any of the other teaching from Robertson et al. is relevant. As is discussed in more detail below, it appears that Robertson et al does not provide any suggestion for the combination of elements recited by amended claim 1.

In the 2/23/05 Office Action, in connection with the previously pending dependent claim 5, which recited among other elements an interaction broker, the Office Action referred to ¶89 of Robertson et al. Paragraph 89 of Robertson et al, provides an overview of what it refers to as one type of a prior art system which is referred to as a hub and spoke system, as shown in Fig. 1B of Robertson et al. The hub and spoke system is described as having

messaging middleware, and it appears that this middleware is being interpreted as an interaction broker component; from the discussion in Robertson et al it appears that this message middleware functions as the hub of the hub and spoke system. However, it should be noted that the hub and spoke arrangement does not appear to provide for bus as described in other embodiments of Robertson et al, and further appears that this hub and spoke system provides no discussion of using containers, with an interface broker as recited by claim 1.

In the 2/23/05 Office Action, in connection with the previously pending dependent claim 6, which recited among other elements a request broker, the Office Action referred to ¶99 of Robertson et al. Paragraph 99 of Robertson et al refers to an alternative prior art system which is different than the hub and spoke system described in ¶89 of Robertson et al. The system referred to in ¶99 is referred to as CORBA (Common Object Request Broker Architecture). Robertson et al. explain that this CORBA system is different than a system which uses messaging middleware "in that they cause processes (components/objects) to be executed in real-time rather than sending data." Robertson et al. ¶99. Thus, the discussion in Robertson et al. ¶99 shows that CORBA system was a separate alternative implementation very different from the hub and spoke system described elsewhere in the Robertson et al.

In the 2/23/05 Office Action, in connection with the previously pending dependent claim 7, which recited among other elements an interaction broker which included an event handler component for invoking the service provider application based on events read from the bus, the Office Action referred to ¶72 of Robertson et al. Paragraph 72 of Robertson et al. refers to a Fig. 35 which shows a MOC (Management Operations Center). It is respectfully submitted that the MOC referred to in Fig. 35 and discussed ¶72 of Robertson et al. (as well as in ¶¶418 – 421 of Robertson et al) refer to an operation of where different events are identified and forwarded to different service personnel (actual people) for handling of the events, and the individual's skills and aptitudes are taking into account when deciding to which person different tasks should be forwarded. It is respectfully submitted that the this operation of forwarding different tasks to individuals is not related to the event handler which invokes different software applications (service provider applications) based on events read from a bus.

In the 2/23/05 Office Action, in connection with the previously pending dependent claim 8, which recited among other elements an interaction broker with a stream handler component for invoking a service provider application based upon data read from a stream, the

Office Action referred to ¶121 and ¶182 of Robertson et al. Paragraph 121 generally refers to a plan for deployment of a NewWave architecture on different generations of underlying technologies and using different products. Paragraph 182 describes using domain registers to among other things list services running a NewWave domain.

It is respectfully submitted that the a careful of review of the each of the above discussed paragraphs from Robertson et al. as well as review the entirety of the Robertson et al. fails to discloses a distributed computing system as recited by claim 1. This is particularly true when one considers the unique and powerful configuration of the service provide container recited by claim 1, ***where the container provide an interaction broker having 3 different components*** (1) request broker; (2) event handler; (3) stream handler, where each of these three component can invoke service provider application as per the needed to interface for the different type of service needed to be provided by the service provider application as determined by the request, event or data stream. Thus, a single service provider application can be utilized to provide a range of different interfaces to provide range of different interactions.

It is respectfully submitted that the collection of different disparate systems discussed in the Robertson et al. does not appear to disclose a computing system with container having a interaction broker as recited in detail in claim 1. Thus, it respectfully submitted that claim 1 and its dependent claims are clearly distinguishable over the reference.

Conclusion

In view of the above, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the pending claims is respectfully requested.

Respectfully submitted,

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Dated: April 29, 2005

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Atty Docket No.: SCHB-3500